

3DVC_Yellow1_NewKindOfJournal

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Open Space

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New kind of journal that brings "Data to Life" - Terry S

3D Cell peer reviewed journal on the web – modern way of doing this – Tim C

Tim: Got idead - at Harvard, eg, stem cell institute published online review of stem cell biology (Stem Book) , indexed in PubMed

Also Pain research forum

These things are getting more like journals and can be made more like journals

Proposed – do virtual web journal on 3DVC, fast turnaround

Combination journal and forum

Instead of journal with articles – insert your software or models so it would work with other components

Very hard, what do you mean?

Data that some of the models would work with -> collaboration; also a test bed and a way to test your model

Terry: Stem book idea. A dream: go to a journal/enhanced – read the abstract, sounds good, go and click a figure and it opens a page to run the model (which is in the cloud) – just to get an idea if you want to go further with it

What stops you from doing this now?

Anita – Sigma (?) reviewers see the code running – has been done. Run in a virtual machine.

Nothing runs forever – b/o VM's have security problems and will be removed

VM runs insides another machine, to encapsulate

Maybe we don't care if it runs only 5 years

May be ways to keep it going

Integration would make it something beyond just the articles that are there – a way to combine things beyond just a single paper's material

Why would someone contribute to this? Might be harder than writing a single paper

NIH: disseminate – maybe should require papers require you to disseminate something others can see

Could have code that runs the data or data that has run on the code

What's involved to get everyone's code to run?

How diverse is this all – VERY!

Interoperability between different softwares directly – won't work; but maybe can agree on a common platform (like SBML) or write converters

?? seems like a lower bar than requiring everything works together from the start

Are there commonalities among large institutions?

Codes are constantly evolving to do things we don't even know about yet

May be runnable within a paper, but not across papers

At a minimum - publish codes and models and datasets so everyone gets everything they need

This journal would be perfect for David to publish atomic models of his paintings

Software engineering industry– write a literate model so those hiring people can see if what you've done is good – would make it different from current models. Codes currently not evaluated.

Some people will and others won't publish their code (?).

Could be different from current models – don't need to be completely original; people don't publish all the details of the model, just applications. This journal would publish full model, made executable

Like a methods publication? Like a model you can run.

Need to understand the interface to be able to use and change a single parameter – how can you do it if you're not a programmer?

Models are judged by the accessibility – people will use it if model and its parameters are accessible

Journal can keep stats on how often a model has been used

PDB stats on usage

But PDB is evaluated by how community uses it, not citations

Phil – did look at where the citations were coming from

Parameters that have to be clear should be a requirement of the journal.

Often, people don't include details of how the model was done (like expts in Methods section). This is part of problem of reproducibility

Is it possible to define a set of parameters that must be understood?

The program/model is its own documentation –

(At least with code) have a prayer of it being reproducible.

Call the journal - PLoS 4D